# COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF RATES OF EAST PENDLETON COUNTY WATER DISTRICT

CASE NO. 97-084

#### ORDER

On April 2, 1997, East Pendleton County Water District ("East Pendleton Water") filed its application for Commission approval of proposed water rates. Commission Staff, having performed a limited financial review of East Pendleton Water's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 10 days from the date of this Order, or 90 days after the date the application was filed, whichever is later, to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 14th day of November, 1997.

ATTEST:

PUBLIC SERVICE COMMISSION

Executive Director

For the Commission

# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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ADJUSTMENT OF RATES OF EAST )
PENDLETON COUNTY WATER : ) CASE NO. 97-084
DISTRICT )

## **STAFF REPORT**

Prepared By: Mark C. Frost Public Utility Financial Analyst, Chief Water and Sewer Revenue Requirements Branch Financial Analysis Division

Prepared By: Brent Kirtley
Public Utility Rate
Analyst, Senior
Communications, Water and
Sewer Rate Design Branch
Financial Analysis Division

### **STAFF REPORT**

### <u>ON</u>

#### EAST PENDLETON COUNTY

### **WATER DISTRICT**

### CASE NO. 97-084

On February 18, 1997, East Pendleton County Water District ("East Pendleton District") submitted its application seeking to increase rates pursuant to 807 KAR 5:001, Section 10, General Rate Adjustments in Existing Rates. However, due to filing deficiencies, East Pendleton District's application was not considered filed until April 2, 1997.

In order to evaluate East Pendleton District's requested increase, Staff performed a limited financial review of East Pendleton District's test-period operations for the 1996 calendar year. The scope of the review was limited to obtaining information to determine whether the 1996 operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

Mark Frost of the Commission's Division of Financial Analysis performed the limited review on June 9, 1997 and October 14, 1997. Mr. Frost is responsible for the preparation of this Staff Report, except for Attachment B, Adjustment A, Metered Water Sales; and Attachment D, Staff's Billing Analysis and Proposed Rates, which were prepared by Brent Kirtley of the Commission's Division of Financial Analysis.

Staff Report Case No. 97-084 Page 2 of 2.

Comparisons of the East Pendleton District's actual and pro forma operations are shown as Attachment A. Based upon Staff's recommended adjustments, East Pendleton District's pro forma operations would appear as set forth in Attachment B.

In its application, East Pendleton District requested an increase in its revenue from rates of \$76,283. As shown in Exhibit C, when East Pendleton District's requested rates are combined with Staff's billing analysis they produce a revenue requirement of \$562,773, an increase in revenue from rates of \$82,394. However, shown in that same attachment, Staff's recommended pro forma operations and the 1.2x debt service coverage normally allowed by this Commission, results in a total revenue requirement from water rates of \$552,626, an increase of \$72,247. The rates contained in Attachment D will achieve Staff's recommended increase of \$72,247.

**Signatures** 

Prepared by: Mark C. Frost

**Public Utility Financial** 

Analyst, Chief

Water and Sewer Revenue

Requirements Branch

Financial Analysis Division

Prepared by: Brent Kirtley

Public Utility Rate Analyst, Senior

Communications, Water and

Sewer Rate Design Branch

Financial Analysis Division

ATTACHMENT A

EAST PENDLETON'S
PRO FORMA
OPERATIONS

	Actual Operations	Pro Forma Adjustments	Pro Forma Operations
Operating Revenues: Un-metered Water Sales	\$204	\$0	A002
Metered Water Sales		0 20	\$204 465.273
	465,273	· ·	465,273
Miscellaneous Service Revenues	6,693	7	6,700
Total Operating Revenues	\$471,966	\$7	\$471,973 
Operating Expenses: Operation & Maintenance Exp:			
Salaries & Wages - Employees	\$86,895	\$14,105	\$101,000
Salaries & Wages - Commissioners	7,100	3,700	10,800
Employee Benefits	1,114	14,549	15,663
Purchased Water	136,910	1,090	138,000
Fuel & Power	17,997	3	18,000
Chemicals	1,950	50	2,000
Materials & Supplies	47,681	319	48,000
Professional Services	4,523	77	4,600
Transportation/Vehicles Exp.	8,500	0	8,500
Insurance - Workers' Compensation	7,568	32	7,600
Insurance - Other	2,864	36	2,900
Misc.	6,587	13	6,600
Total Operation & Maintenance	\$242,794	\$19,869	\$262,663
Depreciation	65,244	6,656	71,900
Taxes Other Than Income	548	7,252	7,800
Total Operating Expenses	\$308,586	\$33,777	\$342,363
Net Operating Income	\$163,380	(\$33,770)	\$129,610
Other Income:	17.012	(4.012)	12 000
Tap-on Fees	17,013	(4,013)	13,000
Interest Income	4,238	762	5,000
Income Available for Debt Service Interest & Principal:	\$184,631	(\$37,021)	\$147,610
Interest Short-Term Debt	4,310	(2,310)	2,000
Principal Short-Term Debt	10,000	`3,300	13,300
Interest Long-Term Debt	77,676	(376)	77,300
Principal Long-Term Debt	18,200	1,800	20,000
Income Available for Operations	\$74,445	(\$39,435)	\$35,010

ATTACHMENT B

STAFF'S PRO FORMA OPERATIONS

Operation Revenues	Gen Ledger Acct No.	Actual Operations	Pro Forma Adjustments	Adj. Ref.	Pro Forma Operations
Operating Revenues: Metered Water Sales	4610:	\$469,147	\$11,232	Α	\$480,379
Miscellaneous Service Revenues	4710 & 4611	8,709	(2,101)	В	6,608
Total Operating Revenues		\$477,856	\$9,131		\$486,987
Operating Expenses:					
Operation & Maintenance Exp:	NI/A	<b>650 540</b>	<b>607.070</b>	•	004.400
Salaries & Wages - Employees:	N/A	\$56,512 7,600	\$37,676	C	\$94,188
Salaries & Wages - Commissioners	9280	7,600	3,200	D	10,800
Employee Benefits	9260	14,800	10,486	E	25,286
Purchased Water	6011	139,020	(1,933)	F	137,087
Fuel & Power	6220	19,518	(1,042)	G	18,476
Chemicals/Testing	6310	34,400	(32,744)	Н	1,656
Materials & Supplies:	6000	(466)	•		(400)
Pumping Supplies	6020	(166)	0		(166)
Pumping Other Supplies & Expense	6230	461	(74.4)		461
Operation Supplies	6410	1,311	(714)	ı	597
Office Supplies	9210	4,397	(7.070)		4,397
Maintenance of Services	6520	11,277	(7,079)	J	4,198
Maintenance of Meters	6530 6550	12,143	(9,062)	K	3,081
Maintenance of Other Plant	6550	510	0		510
Outside Services- Accounting	9002	3,064	(F 805)		3,064
Outside Services	9230	7,853	(5,805)	L	2,048
General & Administrative:	6004	940	404		4 000
Telephone	6221,	819	184	M	1,003
License	6240	85	0		85
Supplies	9003	979	0		979
Insurance	9240	2,864	1,691	N	4,555
Insurance - Workers' Compensation	9261	5,309	343	0	5,652
Misc. (Xmas Bonus)	9250	1,700	(300)	Р	1,400
Misc. General	9300	3,840	0		3,840
Transportation	9330	4,596	0		4,596
Vehicle Maintenance	9331	3,967	0	•	3,967
Office Rent	9335	300	(300)	Q	0
Equipment Rent	9340	902	0		902
Maint. General Plant	9350	2,398	0		2,398
Total Operation & Maintenance		\$340,459	(\$5,399)		\$335,060
Depreciation	9403	69,313	7,022	R	76,335
Amortization	N/A	0	2,020	S	2,020
Taxes Other Than Income	9408	7,083	845	T	7,928
Total Operating Expenses		\$416,855	\$4,488		\$421,343
Net Operating Income Other Income:		\$61,001	\$4,643		\$65,644
Merchandising, Jobbing, & Contract Deductions	4850	6,397	(6,397)	U	0
Interest Income	4800	8,972	0,537)	-	8,972
Income Available for Debt Service	:	\$76,370	(\$1,754)		\$74,616

#### A. Metered Water Sales:

Staff prepared a billing analysis using the test-period customer usage information and the current tariffed rates on file with the Commission. The billing analysis has been adjusted to reflect East Pendleton's projected 20 new customers. This adjustment reflects the results of Staff's analysis.

Normalized Revenue from Water Rates Less: Reported Revenue from Water Rates	\$480,379 469,147
Staff's Pro Forma Adjustment	\$11,232

#### B. Miscellaneous Service Revenues:

Revenues from the sewer customers were included in the water division's miscellaneous service revenues. Staff's adjustment removes the misclassified sewer revenues from the water division's test-period operating revenues.

Revenue from Sewer Rates

(\$2,101)

#### C. Salaries & Wages - Employees:

Because the maintenance employees were hired during the test-period, the over-time hours used by Staff for these employees is for the 12-month period beginning with their first full week of work. During 1997 the part-time office employee pay rate switched from monthly salary to hourly. Staff's adjustment reflects the average hours the part-time office employee worked in 1997. Staff assumed each full-time employee worked 2,080 regular hours and used the 1997 hourly pay rates.

1 I marrella		· Hou	urs			
Wages	Period	Regular	Overtime	Regular	Overtime	Staff
\$18.25	01/01/96 to 12/31/96	2,080.00	0.00	\$37.960	\$0	\$37,960
\$9.00	01/01/96 to 12/31/96	2,080.00	0.00	\$18,720	•	18,720
\$9.00	06/25/97 to 10/08/97	282.36	0.00	\$2,541		2.541
\$10.00	08/26/96 to 08/27/97	2.080.00	72.00		•	21,880
\$9.50	01/31/96 to 01/29/97	2,080.00	58.00	\$19,760	\$827	20,587
						\$101,688
		390	(1.5 Daily Hour	s x 260 Annual \	Norkdays) =	(3,900) (3,600)
						\$94,188 56,512
ljustment					<del></del>	\$37,676
	\$18.25 \$9.00 \$9.00 \$10.00 \$9.50 & Wages-Eto Sewer D \$10 (er Fee) & Wages-Er & Wages -	Wages Period  \$18.25 01/01/96 to 12/31/96 \$9.00 01/01/96 to 12/31/96 \$9.00 06/25/97 to 10/08/97 \$10.00 08/26/96 to 08/27/97 \$9.50 01/31/96 to 01/29/97  & Wages-Employees to Sewer Division \$10 (Hourly Rate) x er Fee)  & Wages-Employees & Wages-Employees & Wages-Employees	Hourly Wages Period Regular  \$18.25 01/01/96 to 12/31/96 2,080.00 \$9.00 01/01/96 to 12/31/96 2,080.00 \$9.00 06/25/97 to 10/08/97 282.36 \$10.00 08/26/96 to 08/27/97 2,080.00 \$9.50 01/31/96 to 01/29/97 2,080.00  & Wages-Employees to Sewer Division \$10 (Hourly Rate) x 390  & Wages-Employees & Wages-Employees & Wages-Employees & Wages-Employees	Wages Period Regular Overtime  \$18.25 01/01/96 to 12/31/96 2,080.00 0.00 \$9.00 01/01/96 to 12/31/96 2,080.00 0.00 \$9.00 06/25/97 to 10/08/97 282.36 0.00 \$10.00 08/26/96 to 08/27/97 2,080.00 72.00 \$9.50 01/31/96 to 01/29/97 2,080.00 58.00  & Wages-Employees to Sewer Division \$10 (Hourly Rate) x 390 (1.5 Daily Hourly Fee)  & Wages-Employees & Wages-Employees & Wages-Employees	Hourly Wages Period Regular Overtime Regular  \$18.25	Hourly Wages Period Regular Overtime Regular Overtime  \$18.25

#### D. <u>Salaries & Wages - Commissioners:</u>

According to KRS 74.020(6), "a water district commissioner shall receive an annual salary of not more than \$3,600." The Pendleton County Judge Executive has approved increasing East Pendleton's commissioner fee to the maximum allowed by statute. Therefore, Staff's adjustment reflects paying each commissioner \$300 per month or \$3,600 annually.

\$3,600 (Annual Commissioner Fee) x Less: Reported Salaries & Wages - Commissioners	:	3 (Commissioners)	=	\$10,800 7,600
Staff's Recommended Adjustment			•	\$3,200
			:	

4.853.922

#### E. Employee Benefits:

Staff's adjustment to salaries and wages - employees results in a corresponding increase to East Pendleton's contribution into the employee retirement system. This adjustment reflects the increase in East Pendleton's contribution and the current health insurance premiums for East Pendleton's employees.

System Manager	\$560 (Monthly He	alth Insurance Premium)	x	12	(Months) =	\$6,720
Bookkeeper/Sec.	\$0 (Monthly He	alth Insurance Premium)	X	12	(Months) =	0
Part-time Office Emp.	\$272 (Monthly He	alth insurance Premium)	x	12	(Months) =	3,264
Full-time Field Emp.	\$346 (Monthly He	alth Insurance Premium)	x	12	(Months) =	4,152
Full-time Field Emp.	\$364 (Monthly He	alth Insurance Premium)	x	12	(Months) =	4,368
Total Pro Forma Health In	surance				-	\$18,504
Multiplied by: Payroll Allo	cation Factor	\$94,188 (Water Sal	aries) \	\$101,688	(Total Payroll) =	92.624%
Net Pro Forma Health Ins	urance				-	\$17,139
Add: Retirement Contribu	tion	\$94,188 (Water Sala	aries) x	8.65%	(Cont. Rate) =	8,147
Pro Forma Employee Ben	efits				-	\$25,286
Less: Reported Employee	e Benefits					14,800
Staff's Recommended Adj	ustment				-	\$10,486
					=	

#### F. Purchased Water:

76,680,080 (Water Purchased Gallons) -

Staff's adjustment reflects the actual test-period water purchases from the City of Falmouth, the estimated water purchases for the 20 new customers, and the rates currently being charged by Falmouth.

71,826,158 (Water Sold - Billing Analysis) =

Divided by: Water Purchased - Gallons	- 1,025,105 (0.516.0012 2 <b>g</b> . 1 <b>.,01</b> 6,	76,680,080
Test-Period Line Loss		6.330%
5,000 (Monthly Customer Usage) x Divided by: Line Loss Reciprocal	240 (20 New Customers x 12-Months) = 6.330% (Test-Period Line Loss) =	1,200,000 93.670%
Pro Forma Water Usage - New Customers Add: Test -Period Purchased Water Gallons		1,281,093 76,680,080
Pro Forma Purchased Water Gallons		77,961,173

City of	f Falmouth Ci	Current Annual Rates Gallons		
First Next	24,000 36.000	\$113.40 Min. Bill \$2.00 Per 1,000 Gal.	24,000 36.000	\$113 72
Next Next	60,000 480,000	\$1.64 Per 1,000 Gal. \$1.35 Per 1,000 Gal.	60,000 480.000	98 648
Over	600,000	\$1.76 Per 1,000 Gal.	77,361,173	136,156
Pro Forma Purchased Water Less: Reported Purchased Water				\$137,087 139,020
Staff's Recommended Adjustment		·		(\$1,933)

#### G. Purchased Power:

The misclassified sewer electricity costs have been removed from the water division's operating expenses.

Sewer Division Purchased Power Expense (\$1,042)

#### H. Chemicals/Testing:

The manager's salary was misclassified as the test-period chemical testing expense. Staff's adjustment corrects East Pendleton's error by including only the chemical and testing fees incurred by the water division in this account.

Reported Chemical/Testing - General Ledger Less: KPDES Testing	\$2,456 800
Actual Chemical/Testing Less: Reported Chemical/Testing	\$1,656 34,400
Staff's Recommended Adjustment	(\$32,744)

#### I. Operation Supplies:

The misclassified sewer supply costs have been removed from the water division's operating expenses.

Sewer Supplies (\$714)

#### J. Maintenance of Services:

Staff's adjustment reflects: (1) removing the cost to install a river crossing and a line extension from test-period operating expenses, since these are capital expenditures they should be depreciated rather than expensed, the associated depreciation adjustment is reflected in adjustment R; (2) the misclassified sewer maintenance costs have been removed from the water division's operating expenses; and (3) a previous years expense has been removed from test-period operating expenses.

Vendor	Description	Amount	Depreciation Lives	Depreciation Expense
U. S. Pipe & Foundry Co. Viking Environmental	River Crossing - Repair Line Extension	(\$1,369) (3,508)	5 40	\$274 88
Total Capital Adjustments		(\$4,877)		\$362
Capital Expenditures Sewer Maintenance 1995 Expense	·			(\$4,877) (127) (2,075)
Staff's Recommended Adjustment				(\$7,079)

#### K. <u>Maintenance of Meters:</u>

The following capital expenditures have been removed from operating expenses, the associated depreciation is included in adjustment R.

Vendor	Description	Amount	Depreciation Lives	Depreciation Expense
Mid-States Meter & Supply	Meter Services	(\$3,498)	10	\$350
Mid-States Meter & Supply	Meter Services	(1,658)	10	166
Mid-States Meter & Supply	Meter Services	(2,226)	10	223
Mid-States Meter & Supply	Meter Services	(580)	10	58
Mid-States Meter & Supply	Meter Services	(550)	10	55
Mid-States Meter & Supply	Pump	(550)	10	55
Total Capital Adjustments		(\$9,062)		\$907

#### L. Outside Services:

M

Staff's adjustment reflects: (1) removing the cost to inspect the water tank from test-period operating expenses, since this is a non-recurring expenditure it should be amortized rather than expensed, the associated depreciation adjustment is reflected in adjustment S; and (2) the misclassified sewer costs have been removed from the water division's operating expenses.

	Vendor		Description	Amount	Amortization Lives	Amortization Expense
	Jay Hoffman	Underw	vater Tank Inspection	(\$3,800)	5	\$760
	Non-Recurring Expenditures Missclassified Sewer Expenses					(\$3,800) (2,005)
	Staff's Recommended Adjustment					(\$5,805)
1.	<u>Telephone::</u> This adjustment reflects the annual cost of	of the pager ob	otained in October 1996.			
	\$23 (Monthly Pager I	Fee) x	8 (Months) =			\$184

#### N. Insurance:

This adjustment reflects the current liability & fidelity bond insurance premiums.

Vendor	Description	Date	Amount
KACo All Lines Fund KACo All Lines Fund	Renewal of FHA Fidelity Bond Property & Liability Coverage	01-Aug-96 01-Jul-96	\$1,015 3,540
Pro Forma Insurance Less: Reported Insurance			\$4,555 2,864
Staff's Recommended Adjustment			\$1,691

#### O. Insurance - Workers' Compensation:

This proposed adjustment reflects the 1996 workers' compensation premium and the pro forma payroll.

Description			Payroll	per \$100	Premium
Waterworks Clerical/Office			\$72,927 21,261	\$0.92109 \$0.03982	\$6,717 85
Total All Modified Classes		:	\$94,188	-	\$6,802
Less: All Discounts	\$6,802 (Modified Premium) x	8.69%	(Discount Rate)	=	(591)
Subtotal Less: Ky Premium Tax	\$6,211 (Subtotal) x	9.00%	(St Tax Rate)	:	\$6,211 (559)
Pro Forma Workers' Com Less: Reported Workers'				-	\$5,652 5,309
Staff's Recommended Ad	ustment			-	\$343

#### P. X-Mas Bonus:

During the test-period, each employee and commissioner recieved a Christmas bonus. For private water companies the Commission has determined that even though employee bonuses and other related types of expense may benefit employer/employee relations, the ratepayers should not bear the cost. However, in this instance the overall-compensation package, including the christmas bonuses, is not unreasonable and the amounts in question are small, Staff believes the bonuses should be included for rate making purposes. Since the Commissioners are now receiving the maximum level of compensation allowed by statute, their bonuses have been eliminated.

Reported X-Mas Bonus (\$300)

#### Q. Office Rent:

East Pendleton owns its office and does not currently pay office rent. Therefore, Staff has removed this expense from pro forma operating expenses.

Office Rent (\$300)

#### R. Depreciation:

This adjustment reflects: (1) depreciating the cost of the new river crossing and water line over the lives contained in east Pendleton's depreciation schedule; and (2) depreciating the capital expenditures removed from test-period operations over their estimated useful lives

	Amount	Depreciation Lives	Depreciation Expense
River Crossing and Water line Maintenance of Services Maintenance of Meters	\$230,130	40	\$5,753 362 907
Staff's Recommended Adjustment			\$7,022

#### S. Amortization:

This adjustment reflects: (1) amortizing East Pendleton's rate case cost over 3-years; and (2) amortizing the non-recurring expenditures removed from test-period operations over their estimated useful lives.

			_	Amount	Amortization Lives	Amortization Expense
Engineering Fee Outside Services Expense	\$6,300 (Both Applications)	x	60% (Allocation) =	\$3,780	3	\$1,260 760
						\$2,020

#### T. Taxes Other Than Income Tax:

Staff's adjustment includes the change in FICA expense resulting from the pro forma payroll adjustment and East Pendleton's current unemployment expense..

\$94,188 (Water Salaries) x \$35,000 (\$7,000 x 5 Emp.) x	7.65% (FICA Rate) = 0.5% (KACo Unemployment Rate) =	\$7,205 175
Pro Forma Payroll Taxes Less: Reported Payroll Taxes	;	\$7,380 6,535
Staff's Recommended Adjustment		\$845

#### U. Merchandising, Jobbing, & Contract Deductions:

The receipt of a tap-on fee is a form of cost free capital that would be recorded as a Contribution In Aid of Construction rather than as revenue. Staff's adjustment corrects East Pendleton's misclassification of its tap-on fee by removing it from test-period operating revenues.

Tap-on Fees (\$6,397)

ATTACHMENT C

STAFF'S REVENUE REQUIREMENT DETERMINATION

# **EAST PENDLETON**

Revenue Requirement - (Application, page 2)	\$566,460
Less: Tap-on Fees	13,000
Interest Income	5,000 6,700
Misc. Service Revenues	6,700
Revenue Requirement - Water Sales	\$541,760
Less: Un-metered & Metered Water Sales	465,477
Requested Increase	\$76,283
Dt. J.D. t Otaffia Dilliam Amphain	\$562.772
Requested Rates - Staff's Billing Analysis Less: Normalized Revenue from Water Rates	\$562,773 480,379
Less. Hornanzed Neveride nom vvater Nates	
Requested Increase	\$82,394 
STAFF	
1973 Revenue Bonds - Avg Debt Service	\$26,033
1992 Revenue Bonds - Avg Debt Service	71,038
KIA Loan - Avg Debt Service	21,723
Total Average Debt Service	\$118,794
Add: Debt Service Coverage \$118,794 (Debt Service) x 0.2 (Coverage) =	23,759
Subtotal	\$142,553
Add: Pro Forma Operating Expenses	421,343
Interest Short-Term Debt	4,310
Total Revenue Requirement	\$568,206
Less: Interest Income	8,972
Revenue Requirement - Operations	\$559,234
Less: Miscellaneous Operating Revenue	6,608
Revenue Requirement - Water Sales	\$552,626
Less: Normalized Revenue - Water Sales	480,379
Recommended Increase	\$72,247

	1973 REVENUE BONDS				. 4.90 2 0. 2.
	Year	Annual Interest 5.000%	Annual Principal Payment	Principal & Interest	Outstanding Balance
O. handal	Beg. Balance 1998 1999 2000	\$13,650 \$13,050 \$12,400	\$12,000 \$13,000 \$14,000	\$25,650 26,050 26,400	\$273,000 \$261,000 \$248,000 \$234,000
Subtotal			•	\$78,100 	
3-Year Av	erage Debt Service		- -	\$26,033	
			VENUE BONDS		
	Year	Annual Interest 7.125%	Annual Principal Payment	Principal & Interest	Outstanding Balance
	Beg. Balance				\$866,000
	1998	\$61,703	\$9,000	\$70,703	\$857,000
	1999	\$61,061	\$10,000	71,061	\$847,000
	2000	\$60,349	\$11,000	71,349	\$836,000
Subtotal			_	\$213,113	
3-Year Av	erage Debt Service		- -	\$71,038	
			(IA Loan		
	Year	Annual Interest 7.000%	Annual Principal Payment	Principal & Interest	Outstanding Balance
	Beg. Balance				\$230,130
	1998	\$16,109	\$5,614	\$21,723	\$224,516
	1999	\$15,716	\$6,007	21,723	\$218,509
	2000	\$15,296	\$6,427 -	21,723	\$212,082
Subtotal			_	\$65,169	
3-Year Av	erage Debt Service		=	\$21,723	

ATTACHMENT D

STAFF'S BILLING ANALYSIS & PROPOSED RATES

#### S U M M A R Y OF COST OF SERVICE STUDY

This cost of service study was prepared to calculate the rates of the East Pendleton County Water District. The purpose of a cost of service study is to fairly allocate expenses among the customer classifications. East Pendleton's current rate design includes a meter charge of \$300 per month for the Dravo Mine and a minimum monthly charge of \$773 for Kincaid Lake State Park. In reviewing the billing analysis and usage patterns of these two customers, Staff could find no justification for the amount of these charges. The rate design for these customers has been changed to better reflect the cost of providing service.

East Pendleton proposed a minimum rate of \$15.00 for its residential customers. In reviewing test year expenses it was determined that this amount would not cover the customer costs and the expenses associated with providing the minimum usage allowance of 1,000 gallons. Staff recommends a minimum rate of \$16.00 for the residential customers. The rates for the Dravo Mine, Kincaid Lake State Park and Mt. Auburn Apartments were determined by calculating the minimum usage amount by the residential rate.

The minimum rate for the Dravo Mine will decrease 28.7 percent and the monthly minimum for the State Park will decrease by 19.93 percent. Based on an average residential usage of 5,000 gallons the customers in Divisions I and III will increase from \$34.65 to 40.36 an increase of 16 percent. The customers in Division II will receive an increase from \$11.00 to \$40.36 an increase of 267 percent.

# **ALLOCATION OF PLANT**

	Total	Commodity	Demand	Customer
	Total	Commodity	Demand	Customer
Land & Land Rights	\$14,157		\$14,157	
Structures & Improvement	46,328		46,328	
Organization	7,200		7,200	
Pumping & Treatment	22,798		22,798	
Distribution Reservoirs	65,883		65,883	
T & D Mains	1,774,002		1,774,002	
Services	106,729			106,729
Meters	60,681			60,681
Hydrants	6,019			6,019
Subtotal	2,103,797	0	1,930,368	173,429
Percentage	100.00%	0.00%	91.76%	8.24%
General Plant (1)	147,677		135,503	12,174
Total	\$2,251,474		\$2,065,871	\$185,603
(1) Allocated based on per	centage of	all other plan	t value.	
Source: East Pendleton V	Vater Distric	t 1996 Annu	al Report	

# **ALLOCATION OF DEPRECIATION**

	Total	Commodity	Demand	Customer
Plant	\$580,917		\$580,917	
Meters & Hydrants	163,534			163,534
Subtotal	744,451		580,917	163,534
Percentage	100.00%		78.03%	21.97%
Other	\$92,404		\$72,106	\$20,298
Total	\$836,855		\$653,023	\$183,832
Source: 1996 Annual Report				

# ALLOCATION OF OPERATION AND MAINTENANCE

	Total	Commodity	Demand	Customer
Operating Expenses				
Operation & Maintenance Expense				
Salaries & Wages-Employees	\$94,188		\$47,127	\$47,061
Salaries & Wages-Commission	10,800		5,400	5,400
Employee Benefits	25,286		12,643	12,643
Purchased Water	137,087	137,087		
Fuel & Power	18,476	18,476		
Chemicals/Testing	1,656	1,656		
Materials & Supplies				
Pumping Supplies	(166)	(166)		
Pumping Other Supplies	461	461		
Operation Supplies	597		299	299
Office Supplies	4,397			4,397
Maintenance of Services	4,198			4,198
Maintenance of Meters	3,081			3,081
Maintenance of Other Plant	510		510	
Outside Services-Accounting	3,064			3,064
Outside Services	2,048		2,048	· · · · · · · · · · · · · · · · · · ·
Subtotal	305,683	157,514	68,027	80,143
Less Commodity	(157,514)			
Total	\$148,169	\$0	\$68,027	\$80,143
Percentage	100.00%		45.91%	54.09%
General & Administrative				
Telephone	\$1,003		\$0	\$0
License	85		0	0
Supplies	979		0	0
Insurance	4,555		0	0
Insurance-Workers Compensation	5,652		0	0
Miscellaneous-Christmas Bonus	1,400		0	. 0
Miscellaneous-General	3,840		0	0
Transportation	4,596		0	0
Vehicle Maintenance	3,967		0	. 0
Equipment Rent	902		0	0
Maintenance General Plant	2,398		0	0
Total Operation & Maintenance	\$29,377		\$0	\$0
Tayos Othor Than Incomo	7.029			
Taxes Other Than Income	7,928		0	0
Total Operating Expenses	\$342,988	\$157,514	\$68,027	\$80,143

# ALLOCATION OF COSTS

	Total	Commodity	Demand	Customer
Allocated Plant Value	\$2,251,474		\$2,065,871	\$185,603
Percentage	100.00%		91.76%	8.24%
Operation & Maintenance	342,988	157,514	85,154	100,320
Depreciation & Amortization (1)	78,355		61,140	17,215
Debt Service (2)	142,553		130,807	11,746
Interest on Short Term Debt	4,310		4,310	
Retail Water Cost	568,206	157,514	281,411	129,281
Less: Other Income	15,580			15,580
Revenue Required From Rates	\$552,626	\$157,514	\$281,411	\$113,701
(1) Depreciation and Amortization ba (2) Debt Service based on percentage			ages	

# ALLOCATION OF COSTS TO RATE BLOCKS

	Total	First 1,000	Next 99,000	Over 100,000
				3.000,000
Actual Water Sales	73,026,158	11,376,200	43,471,998	18,177,960
Percent	100.00%	15.58%	59.53%	24.89%
Weighted Sales for Demand	89,582,258	17,064,300	54,339,998	18,177,960
Percent	100.00%	19.05%	60.66%	20.29%
Allocation for Volumetric Costs				
Commodity	157,514	24,538	93,767	39,209
Demand	281,411	53,605	170,702	57,104
Total	438,925	78,143	264,469	96,313
Water Rate (1)		6.87	6.08	5.30
Plus Customer Charge (1)	113,701	9.58	· · · · · · · · · · · · · · · · · · ·	
Total Rate		\$16.45	\$6.08	\$5.30
(1) Minimum bill for customer cost	by 11,872 bills			

Figure   First   1,000   9, 15   8,405,590   \$11,93   \$109,171,143   \$16,000   \$1,46,416.00   \$34,128%   \$10,000   \$1,500   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,000   \$1,				NOR	NORMALIZED TEST YEAR	AR		RECOMME	RECOMMENDED RATES	INCREASE
NORMALIZED TEST YEAR   REVENUE   RATE   RATE   REVENUE   RATE   RATE   REVENUE   RATE   RATE   RATE   REVENUE   RATE	<b>K</b>		000,00	8,151 9,151	<b>a</b>	ı	REVENUE \$109,171.43 181,248.63 974.66 \$291,394.72	1	REVENUE 1146,416.00 194,331.72 987.71 5341,735.43	34.12% 7.22% 1.34%
METER CHARGE         12         0 \$300.00         \$3,600.00           FIRST 100,000         1,200,000         5.68         6,816.00         5.30         85,606.87         7,426.92         7.426.92           OVER 100,000         16,152,240         5.23         84,476.22         \$94,892.22         \$93,033.79         1N           FIRST 100,000         12         910,450         \$773.00         \$9,276.00         \$618.91         \$7,426.92         1N           FIRST 100,000         12         910,450         \$773.00         \$9,276.00         \$618.91         \$7,426.92         1N           OVER 100,000         12         910,450         \$773.00         \$9,276.00         \$618.91         \$7,426.92         1N           FIRST 20,000         12         \$10,450         \$773.00         \$9,619.85         \$17,175.53           FIRST 20,000         12         \$240,000         \$119.85         \$1,438.20         \$1,31.71         \$1,580.52           NOER 100,000         12         240,000         \$1.985.34         \$0.00         \$1.31.52           OVER 100,000         12         240,000         \$1.985.34         \$1.505.34         \$1.31.71         \$1.31.52           OVER 100,000         12         240,000         <				NOR	MALIZED TEST YE	SAR	REVENUE	RECOMME	NDED RATES	INCREASE
NORMALIZED TEST YEAR   RAIE   REVENUE   RAIE   REVENUE		METER FIRST   OVER	CHARGE 100,000	2	0,200,000 ,152,240	\$300.00 5.68 5.23	\$3,600.00 6,816.00 84,476.22 \$94,892.22	\$618.91 5.30	7,426.92 85,606.87 \$93,033.79	-28.70% 1.34%
FIRST 100,000 12 910,450 \$773.00 \$9,276.00 \$618.91 \$7,426.92				NO.	MALIZED TEST YE	AR		RECOMME	NDED RATES	INCREASE
NORMALIZED TEST YEAR   RECOMMENDED RATES   INC.	STATE PAR		000,000	- BILLS	GALLONS 910,450 1,839,360 2,749,810	RATE \$773.00 5.23_	\$9,276.00 9,619.85 \$18,895.85	RATE \$618.91 5.30	# REVENUE # 7,426.92 9,748.61 # 17,175.53	-19.93% 1.34%
FIRST         20,000         12         240,000         \$119.85         \$1,438.20         \$131.71         \$1,580.52           NEXT         80,000         185,800         5.68         1,055.34         6.09         1,131.52           OVER         100,000         0.00         5.23         0.00         5.30         0.00           425,800         \$2,493.54         \$2,493.54         \$2,712.04				NORA	4ALIZED TEST YE	AR		RECOMME	NDED RATES	INCREASE
	ARTMENTS :R	FIRST NEXT OVER	20,000 80,000 00,000	BILLS	0000	\$119.85 5.68 5.23	\$1,438.20 1,055.34 0.00 \$2,493.54	RATE \$131.71 6.09 5.30	\$1,580.52 1,131.52 0.00 \$2,712.04	9.90% 7.22% 1.34%